Coal dust details

Source: Coal Dust Frequently Asked Questions

http://www.bnsf.com/customers/what-can-i-ship/coal/coal-dust.html

Excerpts from this statement.

Since 2005, BNSF has been at the forefront of extensive research regarding the impacts of coal dust escaping from loaded coal cars as they depart from the Powder River Basin (PRB). From these studies, BNSF has determined that coal dust poses a serious threat to the stability of the track structure and thus to the operational integrity of our lines in the Powder River Basin. The Surface Transportation Board (STB) has confirmed that coal dust is a harmful contaminant of rail ballast.

Coal dust suppression measures have been used extensively in areas outside the PRB. The most common measure has been the application of a dust suppression topper agent (e.g., surfactant) to the coal shipment at the time of loading. Topper Agents have been used with positive results for several years.

Topper agents can be sprayed over the loaded coal to keep the coal in place during transit. Other coal dust reduction technologies are being explored and developed. For example, tests are currently being carried out on a compaction technique that could be applied during the coal loading process. Topper agents and other available measures must be applied by the shipper or its mine agent at the mine origin.

Since 2005, BNSF has been conducting studies in the PRB of coal dust and various measures available to reduce the release of coal dust from loaded cars. These studies have confirmed that the proper application of certain topper agents, along with the use of a modified loading chute, can reduce coal dust levels by at least 85 percent. Also, during a seven month period in 2010, BNSF undertook a large-scale field trial ("Super Trial") of coal dust mitigation measures so that shippers could obtain more information on the effectiveness of various mitigation measures. The trial involved participation by vendors as well as several mines and coal shippers. Different topper agents were tested in the laboratory and in the field on operating coal trains to determine the effectiveness of different products and services in reducing coal dust releases. The Super Trial confirmed that the application of certain topper agents, when used in combination with a modified loading chute, can reduce coal dust losses by at least 85%.

Does BNSF have the authority to establish loading rules to deal with coal dust?
Yes. In March 2011, the Surface Transportation Board (STB), the federal agency with regulatory authority over BNSF coal transportation, issued a decision in a case brought by Arkansas Electric Cooperative Corporation finding that BNSF has a right to establish reasonable coal loading requirements that will prevent the loss of coal dust from the tops of open top coal cars.

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